# **Developing Software policy**

When people sit down at an office or university computer, it's almost second nature to start looking for programs that they use in everyday tasks. These programs can range from simple word processing to complex enterprise systems. But once in awhile, people find that not every computer that they use at the office and university are the same. They are different because of what they are intended to be used for and who uses them. This is where having software policy is important and why people need to have them. They establish guidelines for users and administrators for everyone that use these computers. The importance of having policy is that "policy will not eliminate the threats...but it will help create a proactive environment where the tools, methods, and procedures are in place to deter attackers and combat the threats effectively" (Farshchi). This is a good example of why software policies are important for users, administrators, and this is why it is important for them take it seriously. Software policy used to help and guide people in a direction when dealing with certain software or software issues. Software policy is like the constitution or guidelines for software that are created for administrators and users. Though the policies may vary from office to office, school to school, and labs to labs, they all serve the same purpose.

- Joint Application Session
  - o Administrator
  - Vendors
  - o Users

A joint application session is when a company, organization, or school publishes a list of requirements and needs for a software that they need, and in return companies that are interested can submit a proposal listing what products they have that comply with the list of requirements. The company, organization, or school can then set up a time and place for a meeting to go into further detail. This includes all the users, administrators, and vendors that are interested in the software. The session gives users and administrators hands-on experience with the software, allowing them to see a live demonstration. This also gives them a preview of what the program can and cannot do. During the demonstration, users of the program can run a variety of tests to see if the software is the right fit for them. This gives them the opportunity to ask and answer questions about the software and its possible potential. These can range from scalability, learning curve, and security issues that are currently known about the software (Griffin). This help administrators prepare for the possible future.

The Joint Application Session is important because, at the administrator level, it helps to make decisions that will affect their plan for the future. The session can help establish relationships between the vendor and the administrator for future contact if there are any questions and answers that are needed. This also provides an opportunity and allows for users' opinions on how they like the look and feel of the software, and its intended uses. The users can get direct answers to their questions during the session. The vendor will get a chance to hear feedback and be able to answer in a more direct manner by working with the users and administrators.

This is important when developing a software policy because it can establish a foundation through "standards of conduct with respect to software acquisition, copying,

transfer and use" (O'Rourke). The administrators, users, and vendors are able to collaborate on information that will be critical for the future. Using this information they will be able to create procedures and establish guidelines to help them avoid any issues or problems that might occur in the future.

### Requirements

- o Procedure
- o Purchasing
- o Administrators
- o Users

One of the processes that could be included in the software policy development process is acquiring or purchasing software. This process helps administrators set standards and procedures to follow when acquiring a product. The administrators will get together with the users and brainstorm what they need in the software. Something they will consider during this step is how they will be using software, which users are allowed to use the software, and what the users' expectations are. Now that the administrators are consolidating a knowledge base to work with, they are able to compare the list of requirements that users demand to what software is out in the open market (Griffin). On the administrator level, they will have to consider how the new software will affect the current network and systems on the network. For example, Administrators can make additional changes to the list of requirements for administrative reasons and formulate a finalist for both users and administrators to agree on before searching for the right software that will fit the needs of their users as well as comply with the list of requirements they have setup.

### Installation

- Administrators and users
- o Licenses and legal documentation
- o Procedures

Another important process in the software policy development is the actual installation of the program. This might not seem as important up front but it is when it is where a lot of the issues and problems develop if not handled correctly. A majority of the time, administrators will be the ones installing the new software onto a machine that people use. The reason for this that they will be the one responsible for acquiring the legal documentation and licenses that will allow them to install the software onto the computers they need them for. There are also policies for installing unknown software on to a computer; this is to safe guide the computer and users. The installations of the unknown software expose the computer to unknown viruses or security leaks. "All software must contain controls that can ensure that individuals can be held responsible for their actions (accountability and non-repudiation)" (Trinity College). These policies are there to ensure that none of this is to happen, and that the work environment is not corrupted. These procedures will also help determine who was responsible for the installation of the software, and find a solution to an issue if one was to arise.

## • Upgrading

- Procedure
- Administrators
- o Testing

Having a policy for upgrading is something that is not considered a priority, but never the less is still an important part to cover in the software policy. This part of the policy is similar to the requirements process except with the added consideration that original software is already installed and with the upgrade being a modification. In some cases if there are major changes in the upgrade, the administrators may treat the upgrade as a complete new software package. The administrators would also have to consider whether or not the upgrades are worth installing and follow through with a procedure which will help determine whether or not the upgrade is needed. An example of this is pricing, price becomes an issue if there is no major difference in the upgrade version and my fell that it may not be worth the upgrade. Another issue that administrators could take into consideration is whether or not the upgrade version will become a security issue if the software has to connect to the network or the internet. If there is enough interest in the software, the administrators would run a variety of test to evaluate the new software. These batteries of test will help determine whether the new software will cause any issues in security or conflictions with any of the other software. For example, the administrator could set aside a few computers and install the newest version of the software and let the users perform daily task.

- Users of the system
  - Administrators
  - o User
  - Software

One of the most important things to consider when developing software policy is the end user; these are the people whom will be using the software everyday. Policy is designed to help users understand the environment they are working with. Even though the surroundings are set in a network, or virtual world, they still need to abide by the rules that help them keep their systems safe. Some policies are designed to help protect users from the dangers of the Internet and maybe even the network they are on. For example, administrators could block off explicit websites that many may find offensives because a vast majority of people may use the same computer. This is done out of common courtesy for others who may be using the computers as well. Another is preventing users to install unknown, untested, or unauthorized software on their computer. Administrators may find this is the best way to protect the computers and keep computer networks safe and secure. These are some examples of how policies can keep users honest and protect them at the same time (Griffin). These are some good examples of how policies can help protect computer systems, networks, and their users. And provide a safe environment for users to work.

#### Consequences

#### Policies and Procedure

Having policy in place will help administrators and manager make decisions quickly and able to act promptly if a crisis occurs. But there are also policies that are meant to discourage people from wrongdoing, or malicious intent. The policies have procedures on how to deal with the person or group of people if they threaten to do harm to the "immediate system "lock-down" to prevent installation of future software; suspension or revocation of computer accounts; and disciplinary action as detailed by the relevant policies and rules for faculty, staff, and students. These actions may include suspension, expulsion or termination of employment" (O'Rourke). The penalties for

violating policy could result in multiple disciplinary actions from the administrators who enforce the policies. For example, someone attending a university was caught installing, or downloading pirated software. The administration would have procedure to deal with the student who violated the policy and take the appropriate action. Another example is, "Inform students and employees of the repercussions associated with software misuse; set forth disciplinary procedures for such misuse; and avoid University liability for individual's violations of copyright law and software licenses." (O'Rourke). A good example of this is that some software policies even have detailed procedures for acquiring legal documentation and licenses. Violation of there policies could mean, if a person is caught without having the correct or proper documents could mean stiff fines and penalties against the company or organization. This is one of the reasons why there are strict installation guidelines.

#### Conclusion

In conclusion, Software policy is important as many more companies, universities, and organizations build larger and more complex computer networks. With more network attacks, hackers breaking into secure areas, and illegal copies of software violations becoming more present today, the need for these policies are becoming more stringent. They will need a way to govern these new computer systems and be able to deal with situations that may arise.

# Work Cite

Jack Griffin. Personal interview 7/2006

Trinity College Dublin "Software Standards Policy"

Information Technology Security, July 9th, 2003

http://www.tcd.ie/ITSecurity/policies/software.php

O'Rourke, Timothy C. "Software Policy Compliance"

The University Community, April 2003

http://www.temple.edu/cs/VPannouncements/softwarecompliancememo.html